

Packet Tracer - Troubleshooting Challenge - Document the Network

Addressing Table

Device	Interface	Device Type (router, switch, host)	IP Address	Subnet Mask	Default Gateway
PC1	NIC	Host			
PC2					
PC3					
PC4					
PC5					
PC6					
PC7					

Device	Interface	Device Type (router, switch, host)	IP Address	Subnet Mask	Default Gateway

Objectives

In this lab, you will document a network that is unknown to you.

- · Test network connectivity.
- Compile host addressing information.
- Remotely access default gateway devices.
- Document default gateway device configurations.
- Discover devices on the network.
- Draw the network topology.

Background / Scenario

Your employer has been hired to take over the administration of a corporate network because the previous network administrator has left the company. The network documentation is missing and needs to be recreated. You job is to document the hosts and network devices including all the device addressing and logical interconnections. You will remotely access network devices and use network discovery to complete a device table and draw the network topology.

This is Part I of a two-part series of activities. You will use the documentation that you create in this activity to guide you as you troubleshoot the network in Part II, **Packet Tracer - Troubleshooting Challenge - Using Documentation to Solve Issues**.

As you investigate and document the network topology, make note of issues that you discover that do not adhere to the practices taught in the CCNA curriculum.

Instructions

Part 1: Test Connectivity

Ping between the PCs and the internet server to test the network. All PCs should be able to ping one another and the internet server.

Part 2: Discover PC Configuration Information

Go to the command prompt of each PC and display the IP settings. Record this information in the documentation table.

Part 3: Discover Information about the Default Gateway Devices

Connect to each default gateway device using the Telnet protocol and record information about the interfaces that are in use in the table. The VTY password is **cisco** and privileged EXEC password is **class**.

C:\> telnet IP_address

Part 4: Reconstruct the Network Topology

In this part of the activity, you will continue recording information about the devices in the network in the Addressing Table. In addition, you will start to diagram the network topology based on what you can discover about the device interconnections.

Step 1: Access Routing Tables on Each Gateway Device.

Use the routing tables in each router to learn more about the network. Make notes of your findings.

Step 2: Discover Non-Gateway Devices.

Use a network discovery protocol to document neighboring devices. Record your findings in the addressing table. At this point you should also be able to begin documenting device interconnections.

Part 5: Further Explore Device Configurations and Interconnections

Step 1: Access Device Configurations.

Connect to the other devices in the network. Gather information about the device configurations.

Step 2: View Neighbor Information.

Use discovery protocols to increase your knowledge of the network devices and topologies.

Step 3: Connect to Other Devices.

Display configuration information for the other devices on the network. Record your findings in the device table.

By now you should know about all the devices and interface configurations in the network. All rows of the table should contain device information. Use your information to reconstruct as much of the network topology as you can.

Reflection

You may have noticed that some of the practices used to configure the network devices are out-of-date, inefficient, or not secure. Make a list of as many recommendations that you have regarding how the devices should be reconfigured to follow the practices that you have learned in the CCNA curriculum.